DOCUMENT RESUME

ED 401 789 HE 029 636

AUTHOR	Burke, Joseph C.
TITLE	Preserving Quality While Enhancing Productivity.
INSTITUTION	State Univ. of New York, Albany. Office of the Chancellor.
REPORT NO	ISSN-1067-8662
PUB DATE	Jul 93
NOTE	44p.; The first part of this report, "Quality Academics, Quality Productivity," was originally delivered as an address at the State University of New York Chancellor's Forum (Bolton Landing, NY, April 6, 1992).
AVAILABLE FROM	Office of the Chancellor, State University of New York, State University Plaza, Albany, NY 12246.
PUB TYPE	Collected Works - Serials (022) -- Viewpoints (Opinion/Position Papers, Essays, etc.) (120)
JOURNAL CIT	Studies in Public Higher Education; n4 Jul 1993
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Accountability; *Evaluation Criteria; Evaluation Methods; *Faculty Evaluation; Faculty Publishing; Faculty Workload; Higher Education; *Institutional Evaluation; *Organizational Effectiveness; Productive Thinking; *Productivity; Quality Control; Self Evaluation (Groups)
IDENTIFIERS	*State University of New York

ABSTRACT

This report addresses the issue of "academic productivity," and the critical views of academia held by the public. The section titled "Quality Academics, Quality Productivity," posits that using new notions of productivity, with their emphasis on quality rather than quantity, will allow academia to increase its own productivity, with faculty as the key. To this end, the paper suggests that outdated quantitative approaches be discarded and calls for new performance models and better ways to measure quality. A nine-point quality agenda is proposed for the State University of New York (SUNY). In "Meeting the Productivity Challenge: System and Campus Performance Reports," the author says that the time has come for colleges and universities to present performance reports to the public, despite the challenge of reconciling autonomy and accountability within the university system. A need for flexibility, for system accountability, for setting performance indicators, and for setting systemwide macro indicators is seen as these dicta are applied to five generic "SUNY 2000" goals. Following the report, five tables detail the funding context and system and campus indicators that summarize "The Condition of SUNY." (CH)

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NUMBER 4 JULY 1993

STUDIES IN PUBLIC HIGHER EDUCATION

ED 401 789

STATE UNIVERSITY OF NEW YORK

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Joseph C. Burke

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HE 026 436

Studies in Public Higher Education is published periodically by the Office of the Chancellor, State University of New York, State University Plaza, Albany, New York 12246. Telephone: (518) 443-5355.

ISSN 1067-8662

Preserving Quality While Enhancing Productivity

Joseph C. Burke

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Quality Academics; Quality Productivity

It takes courage for a University Provost to talk to trustees, presidents, and governance leaders on academic productivity in the wake of the largest budget cut in SUNY's history. I feel like Niccolo Machiavelli on his deathbed. The author of *The Prince* was surrounded by priests urging him to renounce Satan with all his wiles and wonts. With his last breath, Machiavelli whispered, "Now is not the time to make new enemies."

But I must confess that my discomfort with the topic of "academic productivity" springs from feelings more visceral and personal than from fear of your reaction. As an academic, I found the topic deeply distasteful. It smacked of mass production by unskilled workers laboring on an assembly line. This image seemed to trivialize and tarnish the lofty goals of higher education and the creative efforts of highly educated faculty. I wished that the issue of academic productivity in colleges and universities would just go away, but I feared that it would not. And, surprisingly, on further reflection, I don't think it should.

It helps, even as it hurts, to see ourselves as others, especially outsiders, see us. Few organizations, perhaps least of all academic institutions, have the inclination to reform themselves without outside pressure. The worst of our critics believe faculty are overpaid and underworked. (By the way, they also think administrators are grossly overpaid and totally useless.) The attitude of these critics toward faculty is captured in the following

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Quality Academics, Quality Productivity was originally delivered as an address at the State University of New York Chancellor's Forum at the Sagamore Hotel in Bolton Landing, New York, on April 6, 1992.

encounter between a college president and a local farmer. "How much do your faculty teach?" asked the farmer. "Twelve hours," the president replied. "Well," said the farmer, "that's a long day, but the work's easy and the pay's too high." We could respond that this farmer probably took federal subsidies for not growing crops, hardly a model of productivity. But perceptions, however false and unfair, are not corrected by cute quips or defensive retorts. Unfortunately, all of us know there are just enough faculty with slack work habits to lend some credence to the belief that professors are not as productive as they should be.

A more serious charge comes from a faithful friend, Derek Bok, who served so long and so well as Harvard's president. He cautioned against academic arrogance and warned of the "dangers of detachment" — of colleges and universities becoming self-centered rather than student- and society-centered. Bok feared that we were becoming more interested in what society and students should do for us, rather than in what we should do for them. His criticism really cuts — not only because it comes from a friend — but because we secretly suspect that he may be more correct than we would care to admit.

A collage of the perceptions of colleges and universities held by our critics and even by some of our friends does not paint a pretty picture. Increasingly, academia is seen as inefficient, extravagant, self-interested, uncaring, and underproductive. This image may explain in part the obvious loss of status of higher education as a high priority for the public and the public's representatives. Like all collages, this picture presents a distorted view of reality, but it certainly does not reflect a vision of academic productivity — of colleges and universities serving in the most effective and efficient way the needs of our students, our state, and our society.

This depressing, if distorted, picture of academia is emerging at a time when concern over the declining competitiveness of the products of American business and industry has made increased productivity a national obsession. The trademark "Made

in America," which once ruled the world markets, has become a label of derision, and the American work force, whose productivity once seemed a world wonder, is now viewed as uncaring, incompetent, and ill-trained. All national issues that emerge in American society sooner or later seem to surface on our campuses. The criticism of American business and industry for poor productivity is now turning inevitably to colleges and universities.

Though the blame is often misplaced, it is readily understandable. American colleges and universities have offered so much promise to so many Americans that we are understandably held to the highest expectations. Somehow, we are expected to make things right, to solve society's problems. Small wonder that all too often our efforts are found wanting. Such is the case with productivity. A large part of the productivity problem is that American workers and professionals are not being trained for a global economy fueled by ideas, innovations, and information in an era when knowledge doubles every decade. Before we can help to solve this problem of American productivity, we must look to our own academic productivity. We should do this, not so much to avoid external criticism, though that is important, but to ensure that our colleges and universities are truly productive organizations whose efforts in instruction, research, and service are valued and meet the needs of the students and society we serve.

Quality, not Quantity

If the bad news is that the cry for increased productivity is now centering on academia, the good news is that the call is for a new brand of productivity that focuses on quality not quantity. The diagnosis of the ills of American industry suggests that its failures flow from an outdated notion of productivity that saw producing more goods at a lower cost as the only objective. This efficiency model defined productivity as producing more outputs with the same or diminished inputs. It neglected effectiveness — the other, and more essential, element in the

productivity equation. In the process, the most important factor in productivity got lost — the concern for quality. We should remember that efficiency does not include effectiveness, but effectiveness does include efficiency. The efficiency model worked well enough after World War II when our inexpensive, mass-manufactured products had few competitors, and the world demand seemed inexhaustible. But now, the high-tech products and sophisticated services that consumers throughout the world want and need put the premium on quality not quantity, on precision not price. Quality has become Job 1, not just at Ford, but in every American industry and enterprise.

Surely, this new notion of productivity offers an opportunity for academia, which has always claimed the pursuit of quality as its special preserve. Long before American business went in search of excellence, academia voiced a passion for quality. It would seem that the new version of productivity is tailor-made for colleges and universities. Indeed, the leading concepts of this new accent on quality, from quality circles to total quality management, originated on campus and were conceived by professors in management and organizational theory.

The problem is that we academics are better at proposing change for others than we are at reforming ourselves. One of a series of Burke's laws that I discovered as a young professor was that the interest of academics in reform is in direct proportion to the distance of the subject from our departments and our campuses. I need not remind you that the resistance to change on campus, especially when it comes from outside pressures, is legendary. Archimedes, the Greek mathematician, claimed that you could move the world if you had a long enough lever. At times, it seems that we academics find it easier to move the world than our campuses. Yet, Archimedes knew that the ability to move an object depended on the placement as well as the length of the lever. The concern for quality is the proper place and the right lever for considering academic productivity. To tackle the topic as an exercise in increasing

efficiency is doomed to fail for it would turn off the faculty, whose creative efforts are the driving force in academic productivity. It would also fail because it would neglect the critical goal of effectiveness. The best way to work on academic productivity is to build on faculty concern for quality.

Faculty are the key to academic productivity. They educate the students, perform the research, and provide the services that form the mission of higher education. Because of their importance to the academic enterprise, they bear the brunt of criticism and the blame when colleges and universities fail to perform as outsiders think they should. In a way, the criticism of faculty is a left-handed compliment. Somehow society expects them to instill in 60 to 80 percent of the high school graduates the same level of knowledge and skills that once was available only to the talented and privileged few. Year after year, faculty are expected, while coping with budget and position cuts, to educate more students, to do more research and creative activities, and to provide more services to society. The public and the public's representatives seem to expect them to do not only more but better with less. Small wonder that faculty resent the pressure that falls mainly on them to increase productivity, when they feel overwhelmed by budget cuts, growing enrollments, and rising expectations in research and service.

Perhaps the real problem with academic productivity is that we are continually asking faculty to do more than any group, however trained and talented, can reasonably be expected to do. Perhaps our expectations of faculty have become unreasonable. Perhaps it is unrealistic to assume that all faculty must be captivating teachers, innovative scholars, and creative problem solvers for all of society's ills. This is an attractive ideal, but one that not only condemns most faculty to disappointment, but also does not contribute to the diversity of missions of the different types of colleges and universities. Perhaps this continuing call for more with less has led colleges and universities to judge the productivity of faculty mostly in quantitative terms at pre-

cisely the moment when business and industry are evaluating their specialized and highly educated professionals on the quality of the services they provide to customers and clients. The new professionals in business and industry are judged on results rather than on the time spent in their offices. Yet colleges and universities act as though the only way to evaluate faculty productivity is to count the hours they spend in class and the number of their publications. Surely, this quantitative approach belies our commitment to quality. It also trivializes the teaching and learning process and research and creative activities.

When judging faculty productivity in instruction, we should remind ourselves that good lectures do not spring easily from professors' minds, like Minerva from the head of Zeus. Duff Berdall, a noted scholar on higher education, observed some years ago that he knew only a few professors who were capable of giving three really good lectures in a single week. And anyone who has studied Plato's dialogues knows that the Socratic method demands even more preparation and planning than lectures, for informative class discussions that encourage student participation and inspire creative thinking are seldom serendipitous. But faculty instructional effort involves much more than preparing for class. It extends to evaluating, advising and mentoring students; revising current courses and preparing new ones; collaborating with departmental colleagues to rework major programs; and serving on campus committees to revamp general education.

Of course, this sketch of faculty instructional time presents an ideal picture of faculty instructional activity — an ideal that many faculty probably do not meet. But the fault lies in part with the prevalent quantitative approach to instructional activity that equates it with classroom contact hours. The term "classroom contact hours" suggests an impersonal event rather than a vital learning interaction between faculty and students. This is the simplistic approach that we expect, and unfortunately get,

from the Comptroller's auditors, but not from academic administrators. Why blame auditors when they equate instruction with contact hours, when we fail to explain the full range of instructional activities that should be performed by faculty? Why fault faculty who see their instructional commitment as limited to holding their classes, when we fail to make clear that their classroom time really represents only a portion of their instructional obligations?

The Need for New Models

In so many unintended but obvious ways, colleges and universities seem to stress the primacy of research over teaching. For example, the criteria for SUNY Distinguished Teaching Professorships require, and the systemwide committee rigorously enforces, a substantial record in research and publication. Indeed, conversations with campus officials confirm the impression that faculty are often nominated for this teaching award because their research record falls just a bit short of the requirement for Distinguished Professorship, which demands a national reputation for research. On the other hand, the Distinguished Professorship requires no evidence of effective teaching. All too often we talk of increasing the teaching load of faculty who are not sufficiently active in research, as though it were a punishment for failure rather than a means of allowing faculty to make a contribution in an area of great importance that is more suited to their talents. We talk of the primacy of teaching in our colleges and of the balance of teaching and research in our graduate and research centers, but our actions suggest that we do not practice what we preach. Faculty who are not active in research are expected to assume more responsibilities for teaching, advising, and curriculum design. If these instructional activities were given the recognition they deserve, such reassignments might be viewed as giving faculty the opportunity to perform vital services where they could excel.

The research obligations of faculty are even less clear to outsiders and even to some insiders. Too often, they consider the hours allocated for research and creative activities as discretionary time that results only sporadically in a paper or grant, or a painting or performance. This reaction from outsiders is understandable, even if unfair. Only someone who has labored in a laboratory running frustrating experiments that don't quite produce the expected results, lurked in libraries searching for that elusive quote, and looked in desperation at a blank page or computer screen when the right words just wouldn't come can know how tiring, troubling, and time-consuming research can be. Only the artist or performer knows how many hours, days, and weeks it took to prepare a single performance or painting. Outsiders can't know this, but administrators have the obligation to explain to the public the trials and tribulations of research and creative activities, as well as the excitement and exhilaration that comes with a project successfully completed. We need to stress that it takes days, weeks, months, even years of tribulations to bring that bright but brief moment of exhilaration. We need to remind the public that the exhilaration does not last long, for the researcher and artist must begin the trials again with a new project. Though this image represents an ideal that not all scholars or artists meet, let no one think that research and creative activities are easy tasks that can be done well in the spare time left after teaching, committees, and the hosts of other activities we expect of faculty.

The problem with research on many campuses is not the work habits of most researchers, but a monolithic model of research that seems to suggest that all faculty members, whatever their individual talents or interests or their institution's mission and resources, should perform the same type and amount of research. We need to encourage a more diverse notion of scholarship that is better suited to the abilities and aspirations of individual faculty members and to the diversity and differences in institutional missions. We also need a broader model of scholarship that includes instruction and does not send a message to

faculty and students that teaching, especially at the undergraduate level, is a less noble task than research, which does not demand rigorous scholarship and requires only repetition of long-known facts and formulas. Campuses should encourage the adoption of the approach in Ernie Boyer's *Scholarship Reconsidered: Priorities of the Professoriate*. By advocating a variety of emphases in scholarship — discovery, integration, application, and teaching — he develops an inclusive model that responds to differences among faculty members and among institutional missions and rejects the traditional conflict between teaching, research, and service. His model also recognizes that the aspirations and abilities of individual faculty inevitably change during the course of a thirty- or forty-year career. Some natural scientists and mathematicians do their best scholarship of discovery at an early age, while many social scientists, humanists, and — thankfully — historians reach their creative peaks late in life.

Ways to Better Measure Quality

But critics argue that all faculty, whether they be young, old, or middle-aged, are too autonomous and are not held accountable for their performance. Outsiders, and even some insiders in academia, complain that faculty are not directly supervised and controlled by administrators and are left to do largely what they want. These critics forget that other highly educated specialists, such as doctors, lawyers, and scientists, working in organizations managed by non-specialists, also operate with incredible degrees of autonomy. It is the hallmark of highly specialized professionals that only their peers — other professionals in their field — have the competence to judge their professional work.

Academia is unique in organizing such peer groups into disciplinary departments to provide this evaluation. Unfortunately, at times — too often I fear — academic departments are not performing their job of peer review and quality assurance. Though administrators cannot assess the work of faculty in a

diversity of disciplines, they should insist that academic departments and departmental chairs do this job. In addition to their tasks of faculty evaluation and quality control, academic departments need to perform better the vital roles of coaching and mentoring new faculty, of helping mature faculty to redirect and rekindle their interests and aspirations, and of instilling a commitment in all faculty to their department, their school, and their campus. Faculty autonomy depends on departmental accountability. Administrators, through their allocation of funds and positions, should ensure that chairs and departments meet fully these professional responsibilities. In addition, administrators should insist on periodic external reviews by faculty from other disciplines on campus and by outside experts from peer institutions to ensure that the activities in each department are achieving institutional goals and meeting the specialized needs of students and society. Such reviews are required in SUNY by Trustee policy, but at times they become routine exercises designed to meet a mandate rather than to improve performance, especially in undergraduate learning. They should follow the principles and procedures outlined so well in a new handbook entitled *Program Review and Educational Quality in the Major*, written by one of our own, John Thorpe, the vice provost for undergraduate education at the University at Buffalo.

Faculty responsibilities in instruction, research, and service should vary depending on the mission of their college or university. Boyer, in *Scholarship Reconsidered*, stresses the importance of diversity of institutional mission by calling for "diversity with dignity." Though the diversity of American higher education is admired throughout the world, the academic culture in America appears to recognize only two models of excellence — the complex graduate and research university and the small liberal arts college. Surely SUNY, as a marvelous mosaic of diverse campus sectors, should champion the cause of multiple models of institutional excellence. SUNY should judge the quality of its colleges and universities not on the number and levels of programs offered but on how well each campus performs its

designated mission. SUNY Central and each of our campuses must not just accept, but must advocate the principle that differences in mission do not imply differences in quality. Recognition of the diversity of institutional missions, along with a broader notion of scholarship, can contribute greatly to faculty productivity by setting clearer goals for faculty and by letting them know that it's quality results that count.

I believe the problem of productivity in colleges and universities flows less from a misuse of faculty resources than from a confusion about institutional purposes and the desired results in instruction, research, and service. For instruction, each campus needs to identify the knowledge and skills it desires for each of its graduates as well as the educational outcomes expected in each of its major programs, to adopt a systematic plan for assessing the extent to which its graduates are achieving these goals, and to utilize the results of this assessment to improve its performance at the department, school, and campus levels. Most SUNY campuses have already moved in this direction with the development of their Assessment Plans. But presidents, academic officers, and faculty leaders must make assessment a top priority on campus and demonstrate by their actions that assessment is not just an added chore but a core activity in teaching and learning. Campus leaders should also define more clearly the research and service objectives of their institution and evaluate more carefully its performance in these critical areas.

In a way, our greatest difficulty with evaluating productivity is our failure to define what we mean by quality. We are right when we claim that the quality of our programs and services can never be adequately measured in quantitative terms. But we are wrong when we allege, as we often do, that quality is so elusive that it is beyond evaluation. Despite our praise of quality and our derision of quantity, when we talk about the quality of colleges and universities to ourselves and to others, we use a resource model that stresses quantity and says little about quality, that emphasizes resource inputs and slights educational

outcomes. The best colleges or universities are the ones that admit students with the highest SATs and high school averages, have the lowest student/faculty ratios, hold the largest number of volumes in their libraries, and have faculty with the largest number of publications, grants, and contracts. We say that teaching is important without defining the results of good teaching by specifying the knowledge and skills that our graduates should possess. We say that research is important without defining the contributions that research should make to the known body of knowledge in a variety of fields, to the dissemination and interrelation of knowledge, and to the betterment of society. We say that service is important without defining the help our states and our society need most.

A Quality Agenda for SUNY

Our document, *SUNY 2000: A Vision for the New Century*, states system goals in instruction, research, and service and identifies special state needs in economic development, environmental conservation, health care, public education, and social services. But SUNY campuses need to supply their own definitions of quality in each of these functions and areas that are tailored to the unique talents of their faculty and staffs and to their institutional missions. SUNY 2000 Tasks Groups in each of the state needs areas are working to identify critical tasks for the system and its campuses. And SUNY 2000, Phase II is a planning process designed to assist campuses in clarifying their missions and goals in instruction, research, and service. If SUNY is to meet the needs of its students, its state, and society in the year 2000, it needs to turn these proposed goals into an action agenda for the decade.

SUNY needs to do more to demonstrate that quality counts more than quantity. If we want quality productivity, we should reward such results in our funding formula. The current benchmark formula of resource distribution is based almost exclusively on quantitative inputs rather than quality outcomes. The

number of students enrolled at the various levels in the different discipline clusters produces a model number of faculty. This model number of faculty equates to a model number of academic support staff. The gross square feet of campus facilities generates a model number of maintenance positions. The benchmarks say nothing about the percent of students who graduated, their time to degree, or the knowledge and skills they acquired. Gross square feet determine the modeled number of maintenance staff with no consideration of how well the buildings are cleaned and maintained. The new resource allocation system that will be developed to replace the benchmark model should contain quality components that reward campuses for excellent performance, while continuing those elements that ensure equity in funding among campuses. The different campus sectors should develop quality or performance indicators that could be included in the new resource allocation model. Campuses within those sectors could use these indicators in their own allocation of resources.

What follows are a series of suggestions of steps the SUNY system and its campuses should take to improve academic productivity.

- SUNY should find better ways to honor and reward diverse models of institutional excellence that are suited to the different missions of their campus sectors.

- Each SUNY college and university, with participation of faculty, students, and administration, should rethink and restate more clearly its relative emphasis on instruction, research, and service and ensure that its allocation of faculty effort and rewards reinforces this emphasis.

- SUNY as a system and each of its campuses should encourage the broader view of scholarship advocated by Ernie Boyer that includes the scholarship of discovery, of integration, of application, and of teaching.

- Campuses should ensure that decisions on promotion, tenure, and merit reflect and reinforce their goals in teaching, research, and service.

- The new resource allocation system that will be developed to replace the benchmark model should contain quality components that reward campuses for excellent performance, as well as elements that ensure equity in funding among campuses.

- Task Groups on Quality should be appointed for each of SUNY's campus sectors to develop quality indicators suited to their missions for use in the new benchmark formula and for use by campuses in their internal allocations.

- The assessment of undergraduate learning and use of its results to improve institutional performance should become the top priority of administrators, faculty, and staff on every SUNY campus; and the system should find ways to reward this critical commitment.

- Academic departments on SUNY campuses should assume the roles and responsibilities performed by "quality circles" and "task groups" in successful Japanese and American companies of training, mentoring, team building, peer evaluation, and quality assurance, and their performance of these critical tasks should be considered seriously by campus administrators when allocating or reallocating positions and funds.

- Faculty Utilization Policies on SUNY campuses should ensure that they use their most precious resource, the faculty, to achieve their institutional mission and meet the needs of the students and that segment of society that they can serve best.

Of course, there are many more proposals that could be suggested. I stopped at nine — remembering that Georges Clemenceau, the French Premier, when asked to comment on President Woodrow Wilson's "Fourteen Points," observed with Gallic sarcasm: "Why God had only ten."

I began by wishing that I were talking about faculty creativity rather than about faculty productivity. After struggling with the topic, I have concluded that faculty creativity and faculty productivity are really one and the same. Faculty productivity on SUNY campuses is much better than our critics believe, but we could make it even better. Efficiency in any organization is a worthy objective, but effectiveness is the ultimate goal of academic productivity. SUNY should develop a passion for quality in instruction, research, and service. We should define it, evaluate it, insist on it, honor and reward it. If we keep all eyes on the prize of quality, we will have found the lever to move SUNY from the biggest university system in the country to the best university system in the land.

APRIL 1992

Meeting the Productivity Challenge: System and Campus Performance Reports

The productivity challenge that confronts American companies is now converging on American campuses. Critics of higher education charge that colleges and universities, despite rising costs, are producing diminishing results. They question whether the value added to students and society is worth the funds supplied to higher education. At issue is the motivation as well as the productivity of academic institutions. Antagonists accuse academics of being more interested in resources than results and allege that colleges and universities are run to satisfy the desires of faculty and administrators rather than the needs of students and society. They complain that American higher education, despite its reputation for diversity, encourages the belief that only graduate and research universities or small and selective liberal arts colleges can aspire to educational excellence.

The bill of particulars against higher education is long; the indictment, damaging. Critics claim that colleges and universities increase enrollments to raise revenues but graduate a declining number of the students enrolled. They contend that graduates take too long to complete degrees yet lack the knowledge and skills required for productive careers and meaningful lives in a knowledge and information society. They complain that colleges and universities duplicate underenrolled programs so faculty can teach specialized courses while failing to provide the required courses students need for graduation. Critics assert that colleges and universities support graduate studies and research at the expense of undergraduate education and allege that teaching loads are reduced to increase discretionary time for faculty research that is directed more to faculty wants than to

societal needs. Detractors also contend that campus facilities are allowed to deteriorate as funds are diverted to support big bureaucracies of highly paid administrators.

The charges are damning, if the claims are correct. Unfortunately, the champions of higher education have responded too often by attacking their critics rather than presenting credible evidence that refutes the charges. The failure of colleges and universities to provide proof of our performance has encouraged the public impression that we must be guilty as charged. Our reluctance to examine openly our own operations, coupled with our readiness to evaluate publicly outside organizations, conveys an attitude of academic arrogance as well as damaging our case. The irony is that available evidence could provide a persuasive, if not a perfect, case that colleges and universities are productive organizations. Presenting reports of our performance could convince the public that we are concerned with results as well as resources. The public does not expect perfection, but it does demand accountability for performance from higher education that costs so much and is so critical to the success of students and society. The time has come for colleges and universities to present periodically and publicly reports of our performance — of the results achieved in relation to the goals assigned and the resources received.

System/Campus Availability

The call for accountability for performance presents a special problem for public university systems and a unique challenge to large and comprehensive systems, such as the State University of New York. SUNY's array of community and technical colleges, comprehensive and specialized colleges, and health science and university centers includes the full range of campus types with the broadest scope of institutional missions and the widest range of admission standards. As is so often the case with multi-campus systems, performance reporting raises the

fundamental question of what should be set by the system and what should be left to the campuses. University systems, such as SUNY, must design performance reports that demonstrate success in achieving their collective missions without including inappropriate indicators that would diminish or distort the diverse missions of their constituent campuses. These reports should demonstrate system accountability without diluting the campus autonomy required to accomplish the multiple missions pursued by their individual units. The reports should include only macro indicators that examine performance from a system, rather than a campus, perspective by assessing collective results in relation to generic goals that are shared by most colleges and universities. Campuses should develop additional micro indicators that reflect their particular goals and those of their institutional types. Systems of higher education must design public reports capable of exhibiting collective accountability while encouraging campus autonomy.

This dual demand requires that system trustees and administrators keep to their appropriate role. They should set system goals and campus missions, allocate resources, and assess results in relation to goals and funding in order to ensure that campuses individually and collectively meet system and state needs. System success depends on deciding what to determine centrally and what to delegate locally to campuses. These are delicate and difficult decisions that demand both sensitivity and courage. To determine too much centrally would kill campus creativity. To demand too little from campuses would destroy the collective capacity to satisfy statewide needs. System performance indicators must reflect this delicate balance between accountability and autonomy.

The challenge for all large, multi-unit organizations, whether university systems or business enterprises, is how to reconcile autonomy and accountability — how to make the most of both their diversity and their unity. Diversity is useless unless their operating units have the autonomy to pursue their different

missions; and unity is worthless without the accountability of the total organization for achieving its collective purposes. Autonomy is necessary to encourage creativity and innovation at the unit level; and accountability is required to ensure coordination and cooperation in the entire organization.

Multi-unit organizations providing a variety of professional services from highly educated specialists face unique challenges in ensuring unity and accountability. The need for autonomy and diversity in their operating units is obvious. The variety of specialized and sophisticated services offered by each of these units to different clienteles demands a high degree of autonomy for the specialized experts who staff them. The rigid rules and regulations that suit large organizations producing routine products for homogeneous markets do not fit professional service enterprises. Their managers can no longer comprehend, much less control, the complex work of specialists. As a result, the new trend in such organizations is maximum delegation of authority for decision making to the professionals who are closest to, and units that are responsible for, the design and delivery of services. Maximum delegation of authority to those making the products or providing services is a cardinal principle of "total quality management." The increased autonomy required in professional service organizations demands new approaches to ensuring accountability for the effectiveness and efficiency of their total operations.

The Need for Flexibility

Colleges and universities are the prototype of professional service organizations. They deliver a myriad of programs and activities to a diversity of clients both on campus and in the community, and at times throughout the state, the nation, and the world. They are staffed by highly educated professionals working in a wide range of specialized disciplines that are beyond the understanding of even the most liberally educated

trustees, presidents, and vice presidents. If trustees and administrators can never fully comprehend and, therefore, control the operations of a diversity of disciplines and departments in a single college or university, such comprehension and control is even more impossible in a university system — and especially in the State University of New York, the largest and most diverse system in the country. The size and diversity of SUNY make the delegation of operational authority to the campuses both essential and inevitable. Detailed and uniform rules and regulations issued from Albany can never fit the diversity of educational missions of community colleges, colleges of technology, specialized and university colleges, and health science and university centers.

The Board of Trustees and the Central Administration, supported by the Governor and the Legislature, recognized this reality in the 1985 flexibility legislation. This law delegated to SUNY campuses increased authority over budgets, personnel, and purchases to assist them in pursuing their different missions and to allow them to respond in unique ways to the changing needs of their students and their regions. Under the flexibility legislation, SUNY has responded to the varying needs of the state and its students and the growing maturity and diversity of its campuses by changing its character from a single unified university with constituent campuses to a single university system composed of colleges and universities that operate with considerable autonomy. A 1989 report from The Legislative Commission on Expenditure Review concluded that the increased delegation of authority to SUNY campuses had encouraged management efficiencies, equipped the system to cope with budget constraints, and enabled the campuses to offer a broader array of programs to an increasing number of students.

Given these successes, the SUNY Trustees and Central Administration are proposing to the Governor and the Legislature a management reform package that would provide additional

autonomy to SUNY campuses. The growing diversity of SUNY colleges and universities and the fiscal condition of New York State demand increased autonomy for SUNY campuses to encourage creative and innovative responses to the different needs of their particular students and their institutional missions. The request for increased autonomy follows a fundamental principle in modern management theory that efficiency and effectiveness require that operating decisions should be made as close as possible to where the products are produced and the clients are served. It recognizes the reality that the courses are taught, the research is performed, and the services are provided on SUNY campuses and not in the State Capitol or at the Central Administration.

New Need for System Accountability

But as the name suggests, a "university," whether a system or a single campus, must have unity as well as diversity. Increased delegation of authority to SUNY's colleges and universities requires increased attention to how SUNY can assure attainment of state and system goals. The SUNY System must devise a new and better mechanism for maintaining accountability that is consistent with the increased delegation of operating decisions to its colleges and universities. This mechanism must recognize two realities. First, no system or campus can be totally autonomous that is not totally self-sufficient. And second, SUNY campuses are much too important to the system and the state to be left to their own devices. SUNY as a system must remain accountable to the state for the quality and the quantity of programs and services that its campuses provide.

Increased autonomy from detailed regulations by the state and its agencies demands a new form of accountability to replace direct control of the operations of SUNY colleges and universities. SUNY must design an accountability mechanism for the system as a whole that ensures that each of its colleges and

universities is fulfilling its assigned mission and contributing to the goals and purposes of the State University of New York. System and campus officials must recognize that the price for increased autonomy from the state and its agencies is demonstrated accountability from the system and its campuses.

Peters and Waterman in their popular book, *In Search of Excellence*, suggest the solution for SUNY's problem of how to combine increased autonomy for its campuses with demonstrated accountability for the system. The book examines some of the most successful multi-unit companies to identify their common characteristics. All of them delegated an astonishing amount of autonomy to operating units without lessening accountability for achieving corporate goals. The secret to the success of these outstanding companies was that they were "tight" on goals and results and "loose" on the means of achieving them. They combined accountability and autonomy by setting goals and evaluating performance, while allowing operating units wide latitude in choosing the means of reaching the desired results. This suggestion provides a solution for the SUNY System as it seeks both increased autonomy for itself and its campuses, and demonstrated accountability for the quality of its collective performance and that of each of its campuses. This solution requires generic goals that reflect the needs of the state and SUNY. The goals must be broad enough to encompass a diversity of institutional missions and student bodies, yet precise enough to enable assessment of the extent of their achievement.

The Need for Performance Indicators

The System and Campus Performance Indicators meet these requirements. They incorporate the generic goals included in the report, *SUNY 2000: A Vision For The New Century*, which was developed by a task force of trustees, system and campus administrators, and faculty and student representatives. The

Governor and legislative leaders have on a number of occasions endorsed these goals as the major purposes of the State University of New York. The following goals reflect common purposes for SUNY units, while allowing for the different missions of each of the university sectors:

- Providing full access to undergraduate education;
- Achieving excellence in undergraduate programs and services;
- Reaching national competitiveness in graduate studies and research;
- Meeting state needs in economic development, environmental conservation, health care, public education, and social services; and
- Enhancing management efficiency and effectiveness.

The missing link for coupling autonomy to accountability is a comprehensive yet comprehensible means for assessing regularly and publicly the degree to which the SUNY system and its colleges and universities are achieving these goals. The performance indicators fill this critical omission. They are designed to present tangible evidence of results in relation to goals and funding. The indicators allow the array of data for the system as a whole, for campus type or sector, and for individual units. They demonstrate current results and provide a means for stimulating improved performance. They are directed to both internal and external audiences. They identify system goals, the indicators of system, sector, and campus performance, and the comparisons used to evaluate the results for system and campus administrators and faculty and staff. Use of the performance indicators will also permit SUNY trustees and system administrators to focus more on encouraging and evaluating results rather than on controls and constraints. They will also allow state officials and legislative leaders to concentrate more on results than on regulations for ensuring quality performance. By centering

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on outcomes rather than means of achieving them, SUNY and state officials can ensure both accountability for common purposes and autonomy for campus operations.

The Independent Commission on the Future of State University in its report, *The Challenge and the Choice*, which urged increased autonomy for the SUNY System and its campuses, also suggested a mechanism similar to the performance indicators to assure accountability. The Commission recommended that the system "collect data to aid its review of state university's performance and educational needs in the state, and to publish such data and analysis." The Trustee's Management Reform Proposal incorporates this recommendation. It proposes that the Central Administration produce a comprehensive assessment of system, sector, and campus performance, especially as related to state needs; that the Board of Trustees review annually the results; and that the Chancellor issue each year to government officials, the media, and the general public a report on system and sector performance followed by a report from each campus of its results.

Systemwide "Macro" Indicators

The goals in the performance indicators should not prove controversial since they were approved in *SUNY 2000* and generally endorsed by state leaders. The choice of particular performance indicators is more problematic. No limited list of indicators can provide a perfect or even a fully satisfactory means of assessing the performance of the large and diverse SUNY System and of the multiple missions of SUNY's sectors and campuses. The term "indicators," rather than "measures," has been chosen to reflect a general assessment rather than a precise measurement and to recognize the difficulty of using a limited number of surrogates for system, sector, and campus performance. A longer list would make the indicators more comprehensive but less comprehensible. It would also risk

eroding campus autonomy by suggesting detailed stipulations rather than strategic directions for SUNY's colleges and universities. The list includes only "macro" indicators that examine results from a system, rather than a campus, perspective by assessing performance in relation to generic goals that are shared by most SUNY units from two-year colleges to university centers. The plan anticipates that campuses will develop additional "micro" indicators that reflect their particular goals and those of their different sectors.

Availability of data in the Central Administration also restricted the number and range of indicators. Existing data were used to avoid the development of added complex and costly information systems that would create a considerable burden on SUNY campuses for collecting additional statistics. This choice also recognizes that the SUNY System has already compiled one of the most comprehensive collections of data bases in the country. The information on almost all of the performance indicators is already collected and spread throughout a variety of current reports. What is new and different in the plan is the publication of this information in a single annual report that is comprehensive and understandable.

The publication will include multiple means of comparison for each indicator. The choices are those traditionally used in comparing the performance of colleges and universities. Current results are contrasted with the past performance. In many ways, comparing present with past performance represents the most appropriate method for evaluating results, since it shows whether the system, its sectors, and its campuses are getting better. The sectors will be compared with national peer institutions and the system with a composite of those peers that replicate the types and mix of SUNY units. A special section of the report will contrast present and past funding for the system and its sectors with that experienced by national peer groups.

Campus results on the macro-indicators will be sent to campus officials prior to the release of the system report. Once the

system report is published, campuses will issue their results on the system macro-indicators and campus micro-indicators along with their explanatory comments. The system and campus reports will later be bound into a single volume for each year in order to track progress over time.

The indicators begin with the "Funding Context" for the system and sectors in comparison with national peer institutions. They display funding trends over time from the various revenue sources, such as appropriations from state and local sponsors, student tuition, external grants and contracts, and other income. Trends are also shown in the percent of the state budget allocated to the SUNY System and the state appropriations per student as well as those from the local sponsors for community colleges. The indicators display education and general cost per student for the system and its sectors in relation to expenditures by national peers. The "benchmark condition" is given for the state-operated campuses as a whole and for campus sectors. This "condition" shows the level of current funding as a percent of a funding model based on data from peer institutions — including the mix of student enrollments by level and discipline, and the cost of general administration, organized activities, institutional support services, and maintenance and operations.

Achieving the Goals of *SUNY 2000*

The main body of indicators is divided into sections relating to the five generic goals in *SUNY 2000*:

- Access in undergraduate education;
- Excellence in undergraduate programs and services;
- National competitiveness in graduate studies and research;
- State needs in economic development, environmental conservation, health care, public education, and social services; and
- Management efficiency and effectiveness.

Access is assessed by indicators on admissions and enrollments, retention and completion rates, and student costs. Admissions data include trends in applicants, acceptances, and enrollments for all students, and by race and gender, and by first-time and transfer students. These statistics are shown along with trends in the number of high school graduates in New York State. Enrollment indicators will illustrate trends in first-time and transfer students, with special attention to minority enrollees and to transfers from two-year SUNY and CUNY colleges to SUNY baccalaureate institutions. Trends in student costs are exhibited through total cost of attendance and the components of tuition and room, board, and fees. Completion rates for degrees and certificates and time-to-degree statistics are presented in relation to admission standards and include data on race and gender, and native and transfer students. To reflect properly results in relation to institutional mission and the goals of nontraditional and part-time students, which are especially important for two-year colleges, the indicators incorporate course completion rates for all students. Data on first year to sophomore transition illustrate success in student retention during the critical initial year in college. All of these statistics are presented for the system and campus sectors.

Undergraduate quality is indicated by the percent of campuses with approved plans for assessing student performance in basic skills, general and specialized education, and personal and social development, as well as by pass rates on certification examinations, such as the National Teaching Exam and the National Collegiate Nursing Exam. In addition, student perceptions of the quality of their undergraduate education are revealed in the American College Testing Surveys, which assess student satisfaction with their intellectual, personal, and social growth and with college services. Results from a survey by the Higher Education Institute led by Alexander Astin will also present faculty perceptions of the quality of undergraduate and graduate education as well as performance in research and service activities. The system will also launch an alumni survey

that will provide data on the perception of the graduates of the quality of their education in SUNY and indicate their success in professions and careers. The proportion of resources devoted to undergraduate instruction and class size by level and program will provide evidence on the commitment of the system and its campuses to undergraduate education. Some, though not all, of these indicators allow national comparisons with peer institutions.

The goal of national competitiveness in graduate education and research is reflected in indicators of enrollment by graduate program and level, and graduation rates and time-to-degree for all graduate students and by race and gender. One aspect of research is illustrated through trends in the dollar volume of sponsored research for all campuses and per full-time faculty for SUNY doctoral centers. The faculty survey from the Higher Education Research Institute of UCLA provides information on publications and creative activities in SUNY compared with national peer institutions. Other quality indicators are the number of national faculty and student awards and national ratings of doctoral programs.

Meeting state needs through work force and professional development is manifested in the number of graduates in science and mathematics, engineering and technologies, nursing and allied health, teacher education, the social sciences, the humanities, and the fine and performing arts. The dollar volume of sponsored research related to economic development, environmental studies, health care, public education, and social services also suggests the extent to which the system and its campuses are meeting state needs in the five critical areas identified in *SUNY 2000*.

Management effectiveness and efficiency is examined through trends in student credit hours per faculty; student/faculty, student/staff, and student/administrator ratios; and ratings of the condition of campus facilities. Additional indicators are the ethnicity and gender of faculty and administrators, and external

fund raising. Faculty and student surveys also provide the perception of these important groups on the effectiveness of management and administrative services.

Conclusion

Though the consultative process used to develop the performance indicators was long, the goal was never in doubt. The indicators were initially presented with the realization that they were admittedly imperfect and that discussion would improve them but also with the conviction that the difficulty of the task must not derail their development. They were discussed twice at different stages with the Council of Presidents, which includes presidents from the full range of SUNY campuses. Both an initial version and a final draft were sent to all Presidents for comment; and the Academic Planning Committee of the Board of Trustees reviewed both the first and the final drafts. A task group of system and campus administrators and faculty representatives refined and revised the proposed indicators. The final document was discussed with faculty union leaders prior to the presentation to, and approval by, the Board of Trustees in February. System officers plan to discuss the performance indicators with officials in the Executive Chamber and the Division of the Budget, with the chairs of the Higher Education Committees, and with leaders in the Senate and the Assembly. SUNY plans to issue the first performance report for the system and its sectors this fall to be followed by the release from the campuses of their performance reports.

The task of designing and implementing performance indicators was difficult, even daunting. No other university system has developed such a comprehensive approach to assessing and publishing its performance of undergraduate and graduate instruction and research and service activities. The risks involved may explain this omission. The plan for assessing results requires mutual trust between state officials and university

leaders. State officials will insist that the evaluation of performance be candid and complete; and university administrators and faculty will demand that the findings not be distorted or misused. Any candid and unbiased evaluation will uncover shortcomings as well as achievements, for no system, sector, nor campus can perform all of the multiple functions of a public university equally well, especially in times of budget constraints. Campus administrators, faculty, and staff will naturally be unwilling to undergo such public scrutiny without the assurance from system and state officials that the results will be evaluated fully and fairly. System and state officials must promise to consider achievements as well as shortcomings and funding as well as results. Most important, state and SUNY officials must also agree that the performance reports will be used as a means to improve performance and not as an excuse to reduce resources.

SUNY's pledge to produce performance reports is based on the belief that it is the best way to respond to our critics, to ensure system accountability, and to support additional autonomy. The Performance Report represents the best response to the productivity challenge, for it will show that SUNY is concerned with results as well as resources. Perhaps critics of public higher education would trouble us less if we concede that criticism as well as charity should begin at home with ourselves. Before we complain more to state governments about what they do for us, we should report regularly what we do for them.

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SPRING 1993

THE CONDITION OF SUNY
Funding Context
Community Colleges & State-Operated Campuses

Funding Context	Indicator	Comparison	Data Source
Funding Context	Revenue by Source (State-Oper.) Tuition State Appropriations Grants & Contracts Other	Trends	Institutional Research IPEDS Finance Survey
	Revenue by Source SUNY Community Colleges Percent Distribution Tuition Local Sponsor State	States	Institutional Research IPEDS Finance Survey
	Tuition Rate Trends (State-Oper. Campuses) (Community Colleges)	Regional & National	NASULGC/AASCU Survey of Tuition & Fees
	State Appropriation Trends (State-Oper. Campuses) (Community Colleges)	Previous Years, State & National Trends	"Grapevine" Reports
	State Appropriations per Student (State-Oper. Campuses) (Community Colleges)	States, Peers	IPEDS Finance Survey Halstead: "State Financing of Public Higher Education" Finance & Business & Institutional Research
	NYS Public Higher Educ. Sector as a Percent of the State Budget (SUNY/CUNY total including CC's)	States	Halstead: "State Financing of Public Higher Education" Finance & Business & Institutional Research
	E & G Expenditures Per Student (Modelled Composite of the State-Oper. System - Enrollment Weighted Reconstruction of System by Institution Type)	Previous Year CUNY & NYS Private National, National Public, Peers, Public Peers	Institutional Research IPEDS Finance Survey
	Benchmark Condition	System/SUNY Sectors	Finance & Business & Institutional Research

THE CONDITION OF SUNY
System & Campus Performance Indicators
Community Colleges & State-Operated Campuses

Goal	Indicator	Comparison	Data Source
Access to Undergraduate Education			
Admissions/ Enrollment			
Admissions	*Applicants	High School Grad. Trends	Institutional Research
	*Acceptances	*% of Applicants Accepted *% of Applicants Enrolled Previous Year(s) (& by Racial/Ethnic Status)	Application Processing Center
Enrollment	*Total Enrolled Students	Previous Year(s)	Institutional Research
	*Enrolled Students (by Race/Ethnicity & Gender)	Previous Year(s)	Institutional Research
	Enrolled Students FT/PT, Level, and Age	Previous Year(s)	Institutional Research
	First-Time Enrollment	Previous Year NYS Sectors High School Grad. Trends	Institutional Research
	Total Transfer Enrollment	Previous Year Compared to Associate Degree recipients	Institutional Research
	Race/Ethnicity of First-Time Students	Prev. Year 12th Graders (by Race/Ethnicity)	Institutional Research
Student Cost	Cost of Attendance	5-Year Trend NYS Sectors As a Percent of Family Income of SUNY Students	Institutional Research Possibly 1987 NPSAS Study and Extrapolation, or State Income Data
	Tuition & Fees	Regional Public Colleges and Universities	
	Room and Board	Trends	
Graduation/ Retention	Graduation Rate Relative to High School Prep.	Previous Year(s)	Institutional Research
	*Graduation rate of Full-Time, First-Time (by Race/Ethnicity)	Previous Year(s) Other NYS Sectors Peers H.S. Decile Rank	Institutional Research NYSED Survey of Peers

continued

*Data currently exist on Campus Fact Sheets for SUNY 2000 Phase II.

THE CONDITION OF SUNY
System & Campus Performance Indicators
Community Colleges & State-Operated Campuses

Goal	Indicator	Comparison	Data Source
	Intra-SUNY Transfers Both With & Without Degrees, From Full-Time, First-Time Cohorts	Previous Year(s)	Institutional Research (Student-Right-To-Know Data)
	Graduation rate of Full-Time Transfers	Other NYS Sectors Peers	Institutional Research NYSED Survey of Peers
	Graduation Rate of Full-Time Transfers with AA/AS Degree vs. AAS Degree	Previous Year(s)	Institutional Research
	Transferring of SUNY Grads % Community College & Tech/Agric. Graduates to - SUNY 4 YEAR - Other NYS 4 Year	 Previous Year(s) Previous Year(s)	 Institutional Research NYSED
	Total Number of Graduates (by Race/Ethnicity & Gender)	Previous Year(s)	Institutional Research
	*Gender	% of Women by Discipline and Level	Institutional Research
	Time to Degree	Previous Year(s) Other Campuses	Institutional Research
	Freshman to Sophomore Retention	Retention Rate Trends	Institutional Research

*Data currently exist on Campus Fact Sheets for SUNY 2000 Phase II.

THE CONDITION OF SUNY
System & Campus Performance Indicators
Community Colleges & State-Operated Campuses

Goal	Indicator	Comparison	Data Source
Undergraduate Quality – Student and Institution			
	Assessment Plans	Previous Year	Institutional Research
	Basic Skills General Education Specialized Education Personal & Social Development	Approved Assessment Plan Periodic Report of Progress	Campus
		Percent of SUNY Campuses with Approved Assessment Plans in These Four Skill Areas	
	Pass Rates on Certification Exams (NTE, Nursing, etc)	Previous Year	Academic Programs and Research
	Student Satisfaction Services & Facilities Environment/Climate Academic Admissions Registration General Campus Contrib. to Growth Intellectual Personal Social Further Academic Study Career Life Long Learning Student Satisfaction with Classroom Experience	Previous Student Opinion Surveys - National and Sector Norms	ACT Student Opinion Survey(s) Institutional Research Administration of ACT College Outcomes/Alumni Survey
	Faculty Opinion Survey Importance at Institution of Students' Intell. Growth, Devel. Leadership Ability, Community Service, etc. Campus climate	National Results Assessment of Faculty of Institution	HERI/UCLA Faculty Study
	First Year: Size of Classes Trends in Who is Teaching Classes – FT, PT, Faculty Adjuncts, TA's Student Class Size Experience	Trends Previous Year(s) Percent Distribution of Classes by Size Intervals	Institutional Research (Course & Section Analysis) CASA/IR

THE CONDITION OF SUNY
System & Campus Performance Indicators
Community Colleges & State-Operated Campuses

Goal	Indicator	Comparison	Data Source
Competitiveness in Graduate Education and Research			
Enrollment	*Enrollment *Masters *Doctors *1st Professional (M.D., D.D.S., O.D., J.D., and D. Pharmacy)	NYS Sectors and Peers	Institutional Research
	*Race/Ethnicity *Gender	NYS Sectors and Peers	Institutional Research
Graduation	*Degrees Granted *Masters *Doctors *1st Professional	Previous Year NYS Sectors and Peers	Institutional Research IPEDS Degrees
	*Race/Ethnicity *Gender	Degrees Granted by Sex and Race/Ethnicity Sector and Peers	IPEDS Degrees
	Time to Doctorate by Field	National Norms	Institutional Research (National Research Council Doctoral Records Project)
Research	Dollar Volume Sponsored Programs (All Campuses)	NYS Sectors and Peers	Research Foundation
	Number of Grants per Full-Time Faculty	NYS Sectors and Peers	Research Foundation
	Dollar Volume Per Full-Time Faculty (Doctoral Campuses)	NYS Sectors and Peers	National Science Foundation (NSF)
	Number of Disclosures	NYS Sectors and Peers	Research Foundation
	Number of Patents	NYS Sectors and Peers	Research Foundation
Recognition	Faculty Awards (Fulbright, Guggenheim, MacArthur Foundation, Nat'l Acad. of Engineering, Nat'l Acad. of Sciences, Kellogg Nat'l Fellowships, Amer. Acad. of Arts & Sci., Sloan Research Fellowships, NSF - Presidential Young Investigator Award)	NYS Sectors and Peers	Academic Programs and Research

continued

*Data currently exist on Campus Fact Sheets for SUNY 2000 Phase II

THE CONDITION OF SUNY
System & Campus Performance Indicators
Community Colleges & State-Operated Campuses

Goal	Indicator	Comparison	Data Source
	Graduate Student Awards (NSF Fellows, Fulbright, Woodrow Wilson, Javits Fellowships)	Sector Peers	Academic Programs and Research
	Faculty Professional Activities	National Data	HERI/UCLA Faculty Study
State Needs			
Workforce Development for: Economic Develop. Environment Health Care Public Education Social Services	Graduates in: Science & Mathematics Engineering & Technologies Nursing & Allied Health Teacher Education All Other Fields by Specific Area	Previous Year(s) NYS Sectors	Institutional Research NYSED
	Percent of Medical Residencies in Primary Care Fields	Previous Year	Office of Health Sciences and Hospitals
	Percent of NYS Grads. from SUNY in Selected Fields	Previous Year(s)	Institutional Research NYSED
	Non-Credit Registrations by Field	Previous Year(s)	Institutional Research NYSED
Sponsored Research	Dollar Volume of Sponsored Programs	NYS Sectors Peers	Research Foundation
	Economic Development Environment Health Care Public Education Social Services		Research Foundation & Campus Survey
	Number of Licenses	Peers	Research Foundation
	Sponsored Programs per FTE (Community Colleges)	Other Two-Year Colleges	Institutional Research IPEDS Finance Data

THE CONDITION OF SUNY
System & Campus Performance Indicators
Community Colleges & State-Operated Campuses

Goal	Indicator	Comparison	Data Source
Management			
Management	Meeting Enrollment Goals by FT/PT, Level, and Higher Education History (First-Time, Transfer, etc.)	Actual Enrollment vs. Goals	Institutional Research
	Student Credit Hours per Faculty Students per Faculty & Staff Students per Faculty Students per Staff Students per Administrator	National Averages Previous Year NYS Sectors Trends Previous Year NYS Sectors & Peers	National Survey of Postsecondary Faculty Personnel Institutional Research (Nat'l EEO-6 Data)
	Trends in Staffing by Function	Previous Year	Finance & Business Institutional Research Update of SUNY "Historical Perspective"
	Facilities Evaluation (Condition of Facilities)	Previous Year Sector	Construction Fund
	Ethnicity and Gender of Faculty and Staff	Previous Year	Personnel Institutional Research
	Fund Raising	Previous Year	University Relations
	Faculty Satisfaction	National Data	HERI/UCLA Faculty Study
	Faculty Distribution by Discipline vs. Workload Distribution by Discipline	Trends	Institutional Research

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